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NEWS 3 Feb 06 Engineering Information Encompass files have new names
NEWS 4 Feb 16 TOXLINE no longer being updated
NEWS 5 Apr 23 Search Derwent WPINDEX by chemical structure
NEWS 6 Apr 23 PRE-1967 REFERENCES NOW SEARCHABLE IN CAPLUS AND CA
NEWS 7 May 07 DGENE Reload

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CURRENT MACINTOSH VERSION IS V5.0C (ENG) AND V5.0JB (JP),
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=> s random mutagens?
L1          0 RANDOM MUTAGENS?

=> s random mutagensis
L2          0 RANDOM MUTAGENSIS

=> s mutagenesis
L3          205733 MUTAGENESIS

=> s random
L4          341978 RANDOM

=> s l3 and l4
L5          6778 L3 AND L4

=> s polynuceotide or polynucleotides
L6          18001 POLYNUCEOTIDE OR POLYNUCLEOTIDES

=> s polynucleotide or polynucleotides
L7          32332 POLYNUCLEOTIDE OR POLYNUCLEOTIDES

=> s 15 and 17
L8          32 L5 AND L7

=> dup rem 18
PROCESSING COMPLETED FOR L8
L9          22 DUP REM L8 (10 DUPLICATES REMOVED)

=> d 19 1-22

L9  ANSWER 1 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN  2001:300865 CAPLUS
DN  134:321560
TI  Directed evolution using random hybridization of homologous
    sequences to transient templates to create sequence variants for
    screening
IN  Coco, Wayne M.; Arendorf, Joseph J.; Crist, Michael J.; Darzins, Aldis;
    Encell, Lance P.; Folsom, Brian R.; Hektor, Hans J.; Nalty, Mark S.;
    Levinson, William E.; Palmer, Stephen R.
PA  Enchira Biotechnology Corporation, USA; et al.
SO  PCT Int. Appl., 158 pp.
    CODEN: PIXXD2
DT  Patent
LA  English
FAN.CNT 2
    PATENT NO.      KIND   DATE           APPLICATION NO.   DATE
    -----  -----  -----  -----
PI  WO 2001029211     A2  20010426       WO 2000-US29046  20001019
    W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
    CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
    HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
    LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
    SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
    YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
    RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
    DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
    CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRAI US 1999-160420     P  19991019
US 2000-514660     A2  20000229
US 2000-218883     P  20000718

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US 2000-219087 P 20000718
US 2000-219090 P 20000718
US 2000-618696 A2 20000718
US 2000-618696 A 20000718
US 2000-618935 A2 20000718

L9 ANSWER 2 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 2001:137366 CAPLUS
DN 134:188966
TI Method for **random mutagenesis** and amplification of nucleic acid
IN Lietz, Eric
PA Genopsys, USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| PI WO 2001012802 | A1 | 20010222 | WO 2000-US22078 | 20000811 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

PRAI US 1999-374274 A1 19990813

RE.CNT 13

RE

- (1) Crea, R; WO 9115581 A 1991 CAPLUS
- (3) Ge, L; BIOTECHNIQUES 1997, V22(1), P28 CAPLUS
- (4) Horton, R; GENE 1989, V77, P61 CAPLUS
- (5) Joyce, G; NUCLEIC ACIDS RESEARCH 1989, V17(2), P711 CAPLUS
- (6) Landt, O; GENE 1990, V96, P125 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 22 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 1
AN 2001:266595 BIOSIS
DN PREV200100266595
TI Recombination of **polynucleotide** sequences using **random** or defined primers.
AU Arnold, Frances H.; Shao, Zhixin (1); Affholter, Joseph A.; Zhao, Huimin H.; Giver, Lorraine J.
CS (1) Pasadena, CA USA
ASSIGNEE: California Institute of Technology
PI US 6153410 November 28, 2000
SO Official Gazette of the United States Patent and Trademark Office
Patents,
(Nov. 28, 2000) Vol. 1240, No. 4, pp. No Pagination. e-file.
ISSN: 0098-1133.
DT Patent
LA English

L9 ANSWER 4 OF 22 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 2
AN 2001:209466 BIOSIS
DN PREV200100209466
TI Methods for generating **polynucleotides** having desired

AU characteristics by iterative selection and recombination.
AU Stemmer, Willem P. C.
ASSIGNEE: Maxygen, Inc.
PI US 6117679 September 12, 2000
SO Official Gazette of the United States Patent and Trademark Office
Patents,
(Sep. 12, 2000) Vol. 1238, No. 2, pp. No Pagination. e-file.
ISSN: 0098-1133.
DT Patent
LA English

L9 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 2000:646133 CAPLUS
DN 133:233579
TI In vitro evolution of protein properties using methods of saturating
mutagenesis and high throughput screening and selection for
specific properties
IN Short, Jay M.; Frey, Gerhard Johann
PA Diversa Corporation, USA
SO PCT Int. Appl., 259 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 15

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2000053744 | A2 | 20000914 | WO 2000-US6497 | 20000309 |
| | WO 2000053744 | A3 | 20010118 | | |
| | W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 6238884 | B1 | 20010529 | US 1999-267118 | 19990309 |
| PRAI | US 1999-267118 | A | 19990309 | | |
| | US 1999-276860 | A | 19990326 | | |
| | US 1999-332835 | A | 19990614 | | |
| | US 1995-8311 | P | 19951207 | | |
| | US 1996-760489 | A1 | 19961205 | | |
| | US 1998-185373 | A2 | 19981103 | | |
| | US 1999-246178 | A2 | 19990204 | | |

L9 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 2000:210351 CAPLUS
DN 132:247119
TI Method for making insertional mutations using in vivo Tn5 transposase
mutagenesis
IN Reznikoff, William S.; Goryshin, Igor Y.
PA Wisconsin Alumni Research Foundation, USA
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---------------|------|----------|-----------------|----------|
| PI | WO 2000017343 | A1 | 20000330 | WO 1999-US21960 | 19990921 |

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN,
IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG,
MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL,
TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG,
KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 6159736 A 20001212 US 1998-159363 19980923
AU 9960573 A1 20000410 AU 1999-60573 19990921
PRAI US 1998-159363 A 19980923
WO 1999-US21960 W 19990921

RE.CNT 8

RE

- (1) Goryshin, I; JOURNAL OF BIOLOGICAL CHEMISTRY 1998, V273(13), P7367 CAPLUS
- (2) Goryshin, I; NATURE BIOTECHNOLOGY 2000, V18(1), P97 CAPLUS
- (3) Junop, M; EMBO JOURNAL 1996, V15(10), P2547 CAPLUS
- (4) Leschziner, A; PROC NATL ACAD SCI USA 1998, V95, P7345 CAPLUS
- (5) Mizuuchi, M; CELL 1992, V70, P303 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 2000:736184 CAPLUS

DN 133:291923

TI Methods of shuffling **polynucleotides** by fragmentation and
multi-cyclic extension

IN Stemmer, Willem P. C.

PA Maxygen, Inc., USA

SO U.S., 61 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| PI US 6132970 | A | 20001017 | US 1998-100856 | 19980619 |

RE.CNT 187

RE

- (2) Andersson; PNAS 1996, V93, P906 CAPLUS
- (3) Anon; EP 552266 CAPLUS
- (4) Anon; EP 0252666 B1 1988 CAPLUS
- (5) Anon; WO 9007576 1990 CAPLUS
- (6) Anon; WO 9014424 1990 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 8 OF 22 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

AN 2000106976 EMBASE

TI Capping DNA with DNA.

AU Li Y.; Liu Y.; Breaker R.R.

CS R.R. Breaker, Department of Molecular Biology, Yale University, New Haven,

CT 06520-8103, United States. ronald.breaker@yale.edu

SO Biochemistry, (21 Mar 2000) 39/11 (3106-3114).

Refs: 39

ISSN: 0006-2960 CODEN: BICHAW

CY United States

DT Journal; Article

FS 029 Clinical Biochemistry

LA English

SL English

L9 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 2000:316413 CAPLUS
DN 134:52004
TI Studies on the two methods of gene **random** mutation in vitro
AU Li, Hong-Jian; Zhang, Yi; Zhou, Tian-Hong; Li, Yue-Qin
CS College of Life Science and Technology, Jinnan University, Canton,
510632,
Peop. Rep. China
SO Yichuan (2000), 22(2), 96-100
CODEN: ICHUDW; ISSN: 0253-9772
PB Yichuan Zazhi Bianjibu
DT Journal
LA Chinese

L9 ANSWER 10 OF 22 LIFESCI COPYRIGHT 2001 CSA
AN 2001:47007 LIFESCI
TI Methods for generating **polynucleotides** having desired
characteristics by iterative selection and recombination
AU Stemmer, W.P.C.
CS Maxygen, Inc.
SO (20000912) . US Patent: 6117679; US CLASS: 435/440; 435/6; 536/23.1;
536/24.3.
DT Patent
FS W3
LA English
SL English

L9 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 1999:811262 CAPLUS
DN 132:45795
TI Method for producing **polynucleotides** with desired properties by
reiterative **mutagenesis** and screening
IN Krebber, Claus M.
PA Maxygen, Inc., USA
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|-----------------|---|----------|-----------------|----------|
| PI | WO 9965927 | A2 | 19991223 | WO 1999-US13479 | 19990615 |
| | WO 9965927 | A3 | 20000210 | | |
| | W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| | AU 9944416 | A1 | 20000105 | AU 1999-44416 | 19990615 |
| | EP 1090024 | A2 | 20010411 | EP 1999-927536 | 19990615 |
| | R: | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | |
| PRAI | US 1998-89649 | P | 19980617 | | |
| | WO 1999-US13479 | W | 19990615 | | |

L9 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2001 ACS

AN 1999:784255 CAPLUS
 DN 132:31726
 TI Compositions of nucleic acid which alter ligand-binding characteristics and related methods and products
 IN Lane, Michael J.; Benight, Albert S.; Faldasz, Brian D.
 PA TM Technologies, Inc., USA
 SO PCT Int. Appl., 62 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9963077 | A2 | 19991209 | WO 1999-US12516 | 19990604 |
| | WO 9963077 | A3 | 20000629 | | |
| | W: JP | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI | US 1998-87905 | P | 19980604 | | |
| | US 1999-324672 | A | 19990603 | | |

L9 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2001 ACS

AN 1998:672658 CAPLUS
 DN 129:271526

TI Recombination of **polynucleotide** sequences using **random** or defined primers
 IN Arnold, Frances H.; Shao, Zhixin; Affholter, Joseph A.; Zhao, Huimin; Giver, Lorraine J.
 PA California Institute of Technology, USA
 SO PCT Int. Appl., 78 pp.
 CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9842832 | A1 | 19981001 | WO 1998-US5956 | 19980325 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 6153410 | A | 20001128 | US 1997-905359 | 19970804 |
| | AU 9869420 | A1 | 19981020 | AU 1998-69420 | 19980325 |
| | AU 724698 | B2 | 20000928 | | |
| | EP 920496 | A1 | 19990609 | EP 1998-915171 | 19980325 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | BR 9804791 | A | 19990817 | BR 1998-4791 | 19980325 |
| | JP 2000511783 | T2 | 20000912 | JP 1998-545987 | 19980325 |
| PRAI | US 1997-41666 | P | 19970325 | | |
| | US 1997-45211 | P | 19970430 | | |
| | US 1997-46256 | P | 19970512 | | |
| | US 1997-905359 | A | 19970804 | | |
| | US 1997-905058 | B2 | 19970801 | | |
| | WO 1998-US5956 | W | 19980325 | | |

L9 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2001 ACS

AN 1998:672568 CAPLUS
 DN 129:286711
 TI Recombination of **polynucleotide** sequences using **random**
 or defined primers and staggered extension
 IN Arnold, Frances H.; Shao, Zhixin; Affholter, Joseph A.; Zhao, Huimin;
 Giver, Lorraine J.
 PA California Institute of Technology, USA
 SO PCT Int. Appl., 101 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9842728 | A1 | 19981001 | WO 1998-US5814 | 19980325 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 6153410 | A | 20001128 | US 1997-905359 | 19970804 |
| | AU 9867725 | A1 | 19981020 | AU 1998-67725 | 19980325 |
| | EP 975653 | A1 | 20000202 | EP 1998-913096 | 19980325 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, PT, IE, FI | | | | |
| PRAI | US 1997-41666 | P | 19970325 | | |
| | US 1997-45211 | P | 19970430 | | |
| | US 1997-46256 | P | 19970512 | | |
| | US 1997-905359 | A | 19970804 | | |
| | US 1997-905058 | B2 | 19970801 | | |
| | WO 1998-US5814 | W | 19980325 | | |

L9 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2001 ACS
 AN 1998:66014 CAPLUS
 DN 128:124509
 TI Method of DNA shuffling with **polynucleotides** produced by
 blocking or interrupting a synthesis or amplification process
 IN Short, Jay M.
 PA Recombinant Biocatalysis, Inc., USA; Short, Jay M.
 SO PCT Int. Appl., 80 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 15

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9801581 | A1 | 19980115 | WO 1997-US12239 | 19970709 |
| | W: AU, CA, IL, JP, US | | | | |
| SE | RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, US 5965408 A 19991012 US 1996-677112 19960709 CA 2259628 AA 19980115 CA 1997-2259628 19970709 AU 9736626 A1 19980202 AU 1997-36626 19970709 EP 1007727 A1 20000614 EP 1997-933438 19970709 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRAI | JP 2000514651 | T2 | 20001107 | JP 1998-505366 | 19970709 |
| | US 1996-677112 | A2 | 19960709 | | |
| | WO 1997-US12239 | W | 19970709 | | |

L9 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2001 ACS
 AN 1998:623998 CAPLUS
 DN 129:240855
 TI Methods for generating **polynucleotides** having desired characteristics by iterative selection and recombination
 IN Stemmer, Willem P. C.; Crameri, Andreas
 PA Affymax Technologies N.V., Neth. Antilles
 SO U.S., 74 pp. Cont.-in-part of U.S. Ser. No. 198,431.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 5811238 | A | 19980922 | US 1995-564955 | 19951130 |
| | US 5605793 | A | 19970225 | US 1994-198431 | 19940217 |
| | EP 934999 | A1 | 19990811 | EP 1998-122040 | 19950217 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE | JP 2001057893 | A2 | 20010306 | JP 2000-201673 | 19950217 |
| | EP 1094108 | A2 | 20010425 | EP 2001-100962 | 19950217 |
| | EP 1094108 | A3 | 20010509 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE | US 5830721 | A | 19981103 | US 1996-537874 | 19960304 |
| | US 6117679 | A | 20000912 | US 1996-621859 | 19960325 |
| | CA 2239099 | AA | 19970605 | CA 1996-2239099 | 19961202 |
| | WO 9720078 | A1 | 19970605 | WO 1996-US19256 | 19961202 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9710873 | A1 | 19970619 | AU 1997-10873 | 19961202 |
| | AU 713952 | B2 | 19991216 | | |
| | EP 876509 | A1 | 19981111 | EP 1996-940934 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | EP 911396 | A2 | 19990428 | EP 1998-122014 | 19961202 |
| | EP 911396 | A3 | 19990506 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000500981 | T2 | 20000202 | JP 1997-520744 | 19961202 |
| | JP 2000308490 | A2 | 20001107 | JP 1999-267847 | 19961202 |
| | EP 1103606 | A2 | 20010530 | EP 2001-103198 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | US 6180406 | B1 | 20010130 | US 1998-99015 | 19980617 |
| | AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI | US 1994-198431 | A2 | 19940217 | | |
| | US 1996-537874 | A2 | 19960304 | | |
| | AU 1995-29714 | A3 | 19950217 | | |
| | EP 1995-911826 | A3 | 19950217 | | |
| | JP 1995-521977 | A3 | 19950217 | | |
| | WO 1995-US2126 | W | 19950217 | | |
| | US 1995-564955 | A2 | 19951130 | | |
| | US 1996-621859 | A | 19960325 | | |

EP 1996-940934 A3 19961202
JP 1997-520744 A3 19961202
WO 1996-US19256 W 19961202

L9 ANSWER 17 OF 22 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 3
AN 1998:121044 BIOSIS
DN PREV199800121044
TI Random-priming in vitro recombination: An effective tool for directed evolution.
AU Shao, Zhixin; Zhao, Huimin; Giver, Lori; Arnold, Frances H. (1)
CS (1) Division Chemistry Chemical Engineering 210-41, California Inst. Technol., Pasadena, CA 91125 USA
SO Nucleic Acids Research, (Jan. 15, 1998) Vol. 26, No. 2, pp. 681-683.
ISSN: 0305-1048.
DT Article
LA English

L9 ANSWER 18 OF 22 LIFESCI COPYRIGHT 2001 CSA
AN 1998:63865 LIFESCI
TI Molecular evolution by staggered extension process (StEP) in vitro recombination
AU Zhao, Huimin; Giver, L.; Shao, Zhixin; Affholter, J.A.; Arnold, F.H.*
CS Div. Chem. and Chem. Eng., California Inst. Technol., Pasadena, CA 91125, USA
SO NAT. BIOTECHNOL., (19980300) vol. 16, no. 3, pp. 258-261.
ISSN: 1087-0156.
DT Journal
FS W3; N
LA English
SL English

L9 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2001 ACS
AN 1997:467751 CAPLUS
DN 127:76978
TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination
IN Stemmer, Willem P. C.; Crameri, Andreas
PA Affymax Technologies N.V., Neth. Antilles; Stemmer, Willem P. C.; Crameri, Andreas
SO PCT Int. Appl., 208 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|--|----------|-----------------|----------|
| PI | WO 9720078 | A1 | 19970605 | WO 1996-US19256 | 19961202 |
| | W: | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| | RW: | KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | |
| | US 5811238 | A | 19980922 | US 1995-564955 | 19951130 |
| | US 6117679 | A | 20000912 | US 1996-621859 | 19960325 |
| | AU 9710873 | A1 | 19970619 | AU 1997-10873 | 19961202 |
| | AU 713952 | B2 | 19991216 | | |
| | EP 876509 | A1 | 19981111 | EP 1996-940934 | 19961202 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI

| | | | | |
|---------------------|----|----------|----------------|----------|
| JP 2000500981 | T2 | 20000202 | JP 1997-520744 | 19961202 |
| AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI US 1995-564955 | A | 19951130 | | |
| US 1996-621859 | A2 | 19960325 | | |
| US 1994-198431 | A2 | 19940217 | | |
| AU 1995-29714 | A3 | 19950217 | | |
| US 1996-537874 | A2 | 19960304 | | |
| WO 1996-US19256 | W | 19961202 | | |

L9 ANSWER 20 OF 22 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 4
 AN 1996:154060 BIOSIS
 DN PREV199698726195
 TI The role of non-catalytic binding subsites in the endonuclease activity
 of bovine pancreatic ribonuclease A.
 AU Moussaoui, Mohamed; Guasch, Alicia; Boix, Ester; Cuchillo, Claudi M.;
 Nogues, Victoria (1)
 CS (1) Dep. de Bioquimica Biol. Mol., Fac. de Ciencies, Univ. Autonoma de
 Barcelona, 08193 Bellaterra Spain
 SO Journal of Biological Chemistry, (1996) Vol. 271, No. 9, pp. 4687-4692.
 ISSN: 0021-9258.
 DT Article
 LA English

L9 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2001 ACS
 AN 1995:863720 CAPLUS
 DN 123:248553
 TI Shuffling **mutagenesis** using pools of randomly-fragmented target
 DNA, PCR reassembly and in vitro and in vivo recombination in the
 creation
 of large libraries
 IN Stemmer, Willem P. C.; Crameri, Andreas
 PA Affymax Technologies N.V., Neth.
 SO PCT Int. Appl., 119 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|--|------|----------|-----------------|----------|
| PI | WO 9522625 | A1 | 19950824 | WO 1995-US2126 | 19950217 |
| | W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UG | | | | |
| | RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5605793 | A | 19970225 | US 1994-198431 | 19940217 |
| | CA 2182393 | AA | 19950824 | CA 1995-2182393 | 19950217 |
| | AU 9529714 | A1 | 19950904 | AU 1995-29714 | 19950217 |
| | AU 703264 | B2 | 19990325 | | |
| | EP 752008 | A1 | 19970108 | EP 1995-911826 | 19950217 |
| SE | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, CN 1145641 | A | 19970319 | CN 1995-191679 | 19950217 |
| | JP 10500561 | T2 | 19980120 | JP 1995-521977 | 19950217 |
| | EP 934999 | A1 | 19990811 | EP 1998-122040 | 19950217 |
| IE | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |

JP 2001057893 A2 20010306 JP 2000-201673 19950217
EP 1094108 A2 20010425 EP 2001-100962 19950217
EP 1094108 A3 20010509

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE

US 5830721 A 19981103 US 1996-537874 19960304
AU 9923816 A1 19990812 AU 1999-23816 19990416

PRAI US 1994-198431 A2 19940217
AU 1995-29714 A3 19950217
EP 1995-911826 A3 19950217
JP 1995-521977 A3 19950217
WO 1995-US2126 W 19950217

L9 ANSWER 22 OF 22 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1983:183559 BIOSIS
DN BA75:33559
TI ISOLATION AND CHARACTERIZATION OF AN ESCHERICHIA-COLI MUTANT LACKING TRANSFER RNA GUANINE TRANS GLYCOSYLASE FUNCTION AND BIOSYNTHESIS OF QUEUOSINE IN TRANSFER RNA.
AU NOGUCHI S; NISHIMURA Y; HIROTA Y; NISHIMURA S
CS BIOL. DIV., NATL. CANCER CENT. RES. INST., CHUO-KU, TOKYO.
SO J BIOL CHEM, (1982) 257 (11), 6544-6550.
CODEN: JBCHA3. ISSN: 0021-9258.
FS BA; OLD
LA English

=> s 15 and PCR
L10 695 L5 AND PCR

=> s 110 and error prone
L11 123 L10 AND ERROR PRONE

=> dup rem 111
PROCESSING COMPLETED FOR L11
L12 42 DUP REM L11 (81 DUPLICATES REMOVED)

=> d 112 1-20

L12 ANSWER 1 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 1
AN 2001:180415 BIOSIS
DN PREV200100180415
TI Altering catalytic properties of 3-chlorocatechol-oxidizing extradiol dioxygenase from *Sphingomonas xenophaga* BN6 by **random mutagenesis**.
AU Riepert, Ulrich; Buerger, Sibylle; Stolz, Andreas (1)
CS (1) Institut fuer Mikrobiologie, Universitaet Stuttgart, 70569, Stuttgart:
Andreas.Stolz@PO.Uni-Stuttgart.DE Germany
SO Journal of Bacteriology, (April, 2001) Vol. 183, No. 7, pp. 2322-2330.
print.
ISSN: 0021-9193.
DT Article
LA English
SL English

L12 ANSWER 2 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 2
AN 2001:152195 BIOSIS
DN PREV200100152195
TI Multiple roles of Arf1 GTPase in the yeast exocytic and endocytic pathways.

AU Yahara, Natsuko; Ueda, Takashi; Sato, Ken; Nakano, Akihiko (1)
 CS (1) Molecular Membrane Biology Laboratory, RIKEN, 2-1, Wako, Saitama,
 351-0198: nakano@postman.riken.go.jp Japan
 SO Molecular Biology of the Cell, (January, 2001) Vol. 12, No. 1, pp.
 221-238. print.
 ISSN: 1059-1524.
 DT Article
 LA English
 SL English

L12 ANSWER 3 OF 42 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 3
 AN 2001158766 EMBASE
 TI Improvement of the optimum temperature of lipase activity for Rhizopus
 niveus by **random mutagenesis** and its structural
 interpretation.
 AU Kohno M.; Enatsu M.; Funatsu J.; Yoshiizumi M.; Kugimiya W.
 CS M. Kohno, Central Research Institute, Tsukuba R and D Center, Fuji Oil
 Co.
 Ltd., 4-3 Kinunodai, Yawara-Mura, Tsukuba-gun, Ibaraki 300-2497, Japan.
 kouno@mail.tkc.fuji oil.co.jp
 SO Journal of Biotechnology, (18 May 2001) 87/3 (203-210).
 Refs: 14
 ISSN: 0168-1656 CODEN: JBITD4
 PUI S 0168-1656(01)00243-7
 CY Netherlands
 DT Journal; Article
 FS 004 Microbiology
 029 Clinical Biochemistry
 LA English
 SL English

L12 ANSWER 4 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 4
 AN 2001:140270 BIOSIS
 DN PREV200100140270
 TI Analysis of the amino terminus of maize branching enzyme II by polymerase
 chain reaction **random mutagenesis**.
 AU Hong, Seokjoo; Mikkelsen, Rene; Preiss, Jack (1)
 CS (1) Michigan State University, Room 201, Biochemistry Building, East
 Lansing, MI, 48824: preiss@pilot.msu.edu USA
 SO Archives of Biochemistry and Biophysics, (February 1, 2001) Vol. 386, No.
 1, pp. 62-68. print.
 ISSN: 0003-9861.
 DT Article
 LA English
 SL English

L12 ANSWER 5 OF 42 CAPLUS COPYRIGHT 2001 ACS
 AN 2000:736184 CAPLUS
 DN 133:291923
 TI Methods of shuffling polynucleotides by fragmentation and multi-cyclic
 extension
 IN Stemmer, Willem P. C.
 PA Maxygen, Inc., USA
 SO U.S., 61 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | US 6132970 | A | 20001017 | US 1998-100856 | 19980619 |

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- (2) Andersson; PNAS 1996, V93, P906 CAPLUS
- (3) Anon; EP 552266 CAPLUS
- (4) Anon; EP 0252666 B1 1988 CAPLUS
- (5) Anon; WO 9007576 1990 CAPLUS
- (6) Anon; WO 9014424 1990 CAPLUS

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L12 ANSWER 6 OF 42 CAPLUS COPYRIGHT 2001 ACS
AN 2000:639148 CAPLUS

DN 133:233552

TI Methods for generating polynucleotides having desired characteristics by iterative selection and recombination.

IN Stemmer, Willem P. C.

PA Maxygen, Inc., USA

SO U.S., 106 pp., Cont.-in-part of U.S. 5,811,238.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|----------|
| PI | US 6117679 | A | 20000912 | US 1996-621859 | 19960325 |
| | US 5811238 | A | 19980922 | US 1995-564955 | 19951130 |
| | US 5837458 | A | 19981117 | US 1996-650400 | 19960520 |
| | CA 2239099 | AA | 19970605 | CA 1996-2239099 | 19961202 |
| | WO 9720078 | A1 | 19970605 | WO 1996-US19256 | 19961202 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9710873 | A1 | 19970619 | AU 1997-10873 | 19961202 |
| | AU 713952 | B2 | 19991216 | | |
| | EP 876509 | A1 | 19981111 | EP 1996-940934 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | EP 911396 | A2 | 19990428 | EP 1998-122014 | 19961202 |
| | EP 911396 | A3 | 19990506 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000500981 | T2 | 20000202 | JP 1997-520744 | 19961202 |
| | JP 2000308490 | A2 | 20001107 | JP 1999-267847 | 19961202 |
| | EP 1103606 | A2 | 20010530 | EP 2001-103198 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | WO 9735966 | A1 | 19971002 | WO 1997-US4715 | 19970320 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9725426 | A1 | 19971017 | AU 1997-25426 | 19970320 |
| | EP 906418 | A1 | 19990407 | EP 1997-916943 | 19970320 |

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI

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|---------------------|----|----------|----------------|----------|
| JP 2000507444 | T2 | 20000620 | JP 1997-534527 | 19970320 |
| US 6165793 | A | 20001226 | US 1998-75511 | 19980508 |
| US 6180406 | B1 | 20010130 | US 1998-99015 | 19980617 |
| AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI US 1995-564955 | A2 | 19951130 | | |
| US 1994-198431 | A2 | 19940217 | | |
| AU 1995-29714 | A3 | 19950217 | | |
| US 1995-425684 | A2 | 19950418 | | |
| US 1996-537874 | A2 | 19960304 | | |
| US 1996-621430 | B2 | 19960325 | | |
| US 1996-621859 | A | 19960325 | | |
| US 1996-650400 | A2 | 19960520 | | |
| EP 1996-940934 | A3 | 19961202 | | |
| JP 1997-520744 | A3 | 19961202 | | |
| WO 1996-US19256 | W | 19961202 | | |
| WO 1997-US4715 | W | 19970320 | | |

RE.CNT 201

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- (1) Andersson; PNAS 1996, V93, P906 CAPLUS
- (2) Anon; EP 552266 CAPLUS
- (3) Anon; EP 252666 B1 1988 CAPLUS
- (4) Anon; WO 9007576 1990 CAPLUS
- (5) Anon; WO 9014430 1990 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 7 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS
 AN 2000:352820 BIOSIS
 DN PREV200000352820
 TI The antiactivator TraM interferes with the autoinducer-dependent binding of TraR to DNA by interacting with the C-terminal region of the quorum-sensing activator.
 AU Luo, Zhao-Qing; Qin, Yiping; Farrand, Stephen K. (1)
 CS (1) Dept. of Crop Sciences, University of Illinois at Urbana-Champaign, 1201 West Gregory Dr., 240 Edward R. Madigan Laboratory, Urbana, IL, 61801
 USA
 SO Journal of Biological Chemistry, (March 17, 2000) Vol. 275, No. 11, pp. 7713-7722. print.
 ISSN: 0021-9258.
 DT Article
 LA English
 SL English

L12 ANSWER 8 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 5
 AN 2000:346140 BIOSIS
 DN PREV200000346140
 TI Phosphorylation of nucleosides by the mutated acid phosphatase from Morganella morganii.
 AU Mihara, Yasuhiro (1); Utagawa, Takashi; Yamada, Hideaki; Asano, Yasuhisa
 CS (1) Applied Microbiology Laboratory, Fermentation and Biotechnology Laboratories, Ajinomoto Co., Inc., 1-1, Suzuki-cho, Kawasaki-ku, Kawasaki-shi, 210-8681 Japan
 SO Applied and Environmental Microbiology, (July, 2000) Vol. 66, No. 7, pp. 2811-2816. print.
 ISSN: 0099-2240.
 DT Article
 LA English
 SL English

L12 ANSWER 9 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 6
AN 2000:254413 BIOSIS
DN PREV200000254413
TI Functional assay for BRCA1: **Mutagenesis** of the COOH-terminal region reveals critical residues for transcription activation.
AU Hayes, Finbarr; Cayanan, Charmagne; Barilla, Daniela; Monteiro, Alvaro N.A. (1)
CS (1) Laboratory of Molecular Oncology, Strang Cancer Prevention Center, The
Rockefeller University, 1230 York Avenue, New York, NY, 10021 USA
SO Cancer Research, (May 1, 2000) Vol. 60, No. 9, pp. 2411-2418. print..
ISSN: 0008-5472.
DT Article
LA English
SL English

L12 ANSWER 10 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 7
AN 2000:153384 BIOSIS
DN PREV200000153384
TI Quantitative analysis of the effect of the mutation frequency on the affinity maturation of single chain Fv antibodies.
AU Daugherty, Patrick S.; Chen, Gang; Iverson, Brent L. (1); Georgiou, George
(1)
CS (1) Institute for Cell and Molecular Biology, University of Texas, Austin,
TX, 78712 USA
SO Proceedings of the National Academy of Sciences of the United States of America., (Feb. 29, 2000) Vol. 97, No. 5, pp. 2029-2034.
ISSN: 0027-8424.
DT Article
LA English
SL English

L12 ANSWER 11 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2000:451438 BIOSIS
DN PREV200000451438
TI High-density **mutagenesis** by combined DNA shuffling and phage display to assign essential amino acid residues in protein-protein interactions: Application to study structure-function of plasminogen activation inhibitor 1 (PAI-1).
AU Stoop, A. Allart; Jespers, Laurent; Lasters, Ignace; Eldering, Eric; Pannekoek, Hans (1)
CS (1) Department of Biochemistry, Academic Medical Center, University of Amsterdam, Amsterdam Netherlands
SO Journal of Molecular Biology, (1 September, 2000) Vol. 301, No. 5, pp. 1135-1147. print.
ISSN: 0022-2836.
DT Article
LA English
SL English

L12 ANSWER 12 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 8
AN 2000:346911 BIOSIS
DN PREV200000346911
TI High-level expression of a polypeptides encoded by a large segment of the envelope gene of HIV-1 in E. coli by directed evolution.
AU Zhang, Yongshu (1); Zhao, Zhihu; Li, Fuguang; Cao, Cheng; Liu, Chuanxuan; Ma, Qingjun
CS (1) Molecular Genetics Key Laboratory, Institute of Biotechnology, Beijing

China

SO Biotechnology Letters, (June, 2000) Vol. 22, No. 11, pp. 947-950. print.
ISSN: 0141-5492.

DT Article
LA English
SL English

L12 ANSWER 13 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 9
AN 2000:370396 BIOSIS
DN PREV200000370396
TI Modeling DNA mutation and recombination for directed evolution experiments.
AU Moore, Gregory L.; Maranas, Costas D. (1)
CS (1) Department of Chemical Engineering, Pennsylvania State University, University Park, PA, 16802 USA
SO Journal of Theoretical Biology, (7 August, 2000) Vol. 205, No. 3, pp. 483-503. print.
ISSN: 0022-5193.

DT Article
LA English
SL English

L12 ANSWER 14 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 10
AN 2001:163443 BIOSIS
DN PREV200100163443
TI **Error-prone PCR** of *Vitreoscilla hemoglobin* (VHb) to support the growth of microaerobic *Escherichia coli*.
AU Andersson, Charlotte I. J.; Holmberg, Niklas; Farres, Judith; Bailey, James E.; Bulow, Leif; Kallio, Pauli T. (1)
CS (1) Institute of Biotechnology, ETH-Zurich, CH-8093, Zurich: paulikal@biotech.biol.ethz.ch Switzerland
SO Biotechnology and Bioengineering, (November 20, 2000) Vol. 70, No. 4, pp. 446-455. print.
ISSN: 0006-3592.

DT Article
LA English
SL English

L12 ANSWER 15 OF 42 BIOSIS COPYRIGHT 2001 BIOSIS DUPLICATE 11
AN 2000:524957 BIOSIS
DN PREV200000524957
TI Directed evolution to improve the thermostability of prolyl endopeptidase.
AU Uchiyama, Hidefumi (1); Inaoka, Tetsuya; Ohkuma-Soyejima, Toyomi; Togame, Hiroko; Shibanaka, Yasuhiko; Yoshimoto, Tadashi; Kokubo, Toshio
CS (1) Department of Biological Science and Technology, Science University of Tokyo, 2641 Yamazaki, Noda, Chiba, 278-8510 Japan
SO Journal of Biochemistry (Tokyo), (Sep., 2000) Vol. 128, No. 3, pp. 441-447. print.
ISSN: 0021-924X.

DT Article
LA English
SL English

L12 ANSWER 16 OF 42 CAPLUS COPYRIGHT 2001 ACS
AN 2000:119638 CAPLUS
DN 132:275952
TI Enantioselective enzymes for organic synthesis created by directed evolution
AU Reetz, Manfred T.; Jaeger, Karl-Erich

CS Max-Planck-Institut fur Kohlenforschung, Mulheim an der Ruhr, 45470,
Germany

SO Chem.--Eur. J. (2000), 6(3), 407-412
CODEN: CEUJED; ISSN: 0947-6539

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L12 ANSWER 17 OF 42 CAPLUS COPYRIGHT 2001 ACS
AN 2000:552862 CAPLUS

DN 133:263028

TI Isolation of directed evolution mutants of chloroperoxidase resistant to
suicide inactivation by primary olefins

AU Rai, Gyan P.; Zong, Qin; Hager, Lowell P.

CS Department of Biochemistry, Roger Adams Laboratory, University of
Illinois, Urbana, IL, 61801, USA

SO Isr. J. Chem. (2000), 40(1), 63-70
CODEN: ISJCAT; ISSN: 0021-2148

PB Laser Pages Publishing

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L12 ANSWER 18 OF 42 CAPLUS COPYRIGHT 2001 ACS
AN 1999:669460 CAPLUS

DN 132:32484

TI New strategies of protein engineering - directed evolution of enzyme in
vitro

AU Zhang, Hongying; Kong, Xiangduo; Zhang, Jin

CS State Key Laboratory of Enzyme Engineering, Jilin University, Changchun,
130023, Peop. Rep. China

SO Chin. Sci. Bull. (1999), 44(18), 1641-1648
CODEN: CSBUEF; ISSN: 1001-6538

PB Science in China Press

DT Journal; General Review

LA English

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AN 1999:808055 CAPLUS
DN 132:132883
TI **Random mutagenesis** libraries: optimization and simplification by PCR
AU Xu, Hao; Petersen, Evamaria I.; Petersen, Steffen B.; El-Gewely, M.
Raafat
CS University of Tromso, Tromso, 9037, Norway
SO BioTechniques (1999), 27(6), 1102, 1104, 1106, 1108
CODEN: BTNQDO; ISSN: 0736-6205
PB Eaton Publishing Co.
DT Journal
LA English
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(2) Copeland, W; J Biol Chem 1993, V268, P11041 CAPLUS
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AN 1999:145784 BIOSIS
DN PREV199900145784
TI **Random mutagenesis** by recombinational capture of PCR products in *Bacillus subtilis* and *Acinetobacter calcoaceticus*.
AU Melnikov, Alexandre; Youngman, Philip J. (1)
CS (1) Millennium Pharmaceuticals Inc., Cambridge, MA 02139-4815 USA
SO Nucleic Acids Research, (Feb. 15, 1999) Vol. 27, No. 4, pp. 1056-1062.
ISSN: 0305-1048.
DT Article
LA English

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L13 8 L7 AND L10

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L13 ANSWER 1 OF 8 LIFESCI COPYRIGHT 2001 CSA
AN 1998:63865 LIFESCI
TI Molecular evolution by staggered extension process (StEP) in vitro recombination
AU Zhao, Huimin; Giver, L.; Shao, Zhixin; Affholter, J.A.; Arnold, F.H.*
CS Div. Chem. and Chem. Eng., California Inst. Technol., Pasadena, CA 91125,
USA
SO NAT. BIOTECHNOL., (19980300) vol. 16, no. 3, pp. 258-261.
ISSN: 1087-0156.
DT Journal
FS W3; N
LA English
SL English

L13 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2001 ACS
AN 2001:137366 CAPLUS
DN 134:188966
TI Method for **random mutagenesis** and amplification of nucleic acid
IN Lietz, Eric
PA Genopsys, USA
SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| PI WO 2001012802 | A1 | 20010222 | WO 2000-US22078 | 20000811 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |

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L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2001 ACS

AN 2000:736184 CAPLUS

DN 133:291923

TI Methods of shuffling **polynucleotides** by fragmentation and
multi-cyclic extension

IN Stemmer, Willem P. C.

PA Maxygen, Inc., USA

SO U.S., 61 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| PI US 6132970 | A | 20001017 | US 1998-100856 | 19980619 |

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- (2) Andersson; PNAS 1996, V93, P906 CAPLUS
- (3) Anon; EP 552266 CAPLUS
- (4) Anon; EP 0252666 B1 1988 CAPLUS
- (5) Anon; WO 9007576 1990 CAPLUS
- (6) Anon; WO 9014424 1990 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2001 ACS

AN 2000:639148 CAPLUS

DN 133:233552

TI Methods for generating **polynucleotides** having desired
characteristics by iterative selection and recombination

IN Stemmer, Willem P. C.

PA Maxygen, Inc., USA

SO U.S., 106 pp., Cont.-in-part of U.S. 5,811,238.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | US 6117679 | A | 20000912 | US 1996-621859 | 19960325 |
| | US 5811238 | A | 19980922 | US 1995-564955 | 19951130 |
| | US 5837458 | A | 19981117 | US 1996-650400 | 19960520 |
| | CA 2239099 | AA | 19970605 | CA 1996-2239099 | 19961202 |
| | WO 9720078 | A1 | 19970605 | WO 1996-US19256 | 19961202 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9710873 | A1 | 19970619 | AU 1997-10873 | 19961202 |
| | AU 713952 | B2 | 19991216 | | |
| | EP 876509 | A1 | 19981111 | EP 1996-940934 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | EP 911396 | A2 | 19990428 | EP 1998-122014 | 19961202 |
| | EP 911396 | A3 | 19990506 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000500981 | T2 | 20000202 | JP 1997-520744 | 19961202 |
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| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | WO 9735966 | A1 | 19971002 | WO 1997-US4715 | 19970320 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
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| | AU 9725426 | A1 | 19971017 | AU 1997-25426 | 19970320 |
| | EP 906418 | A1 | 19990407 | EP 1997-916943 | 19970320 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000507444 | T2 | 20000620 | JP 1997-534527 | 19970320 |
| | US 6165793 | A | 20001226 | US 1998-75511 | 19980508 |
| | US 6180406 | B1 | 20010130 | US 1998-99015 | 19980617 |
| | AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI | US 1995-564955 | A2 | 19951130 | | |
| | US 1994-198431 | A2 | 19940217 | | |
| | AU 1995-29714 | A3 | 19950217 | | |
| | US 1995-425684 | A2 | 19950418 | | |
| | US 1996-537874 | A2 | 19960304 | | |
| | US 1996-621430 | B2 | 19960325 | | |
| | US 1996-621859 | A | 19960325 | | |
| | US 1996-650400 | A2 | 19960520 | | |
| | EP 1996-940934 | A3 | 19961202 | | |
| | JP 1997-520744 | A3 | 19961202 | | |
| | WO 1996-US19256 | W | 19961202 | | |
| | WO 1997-US4715 | W | 19970320 | | |

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 (3) Anon; EP 252666 B1 1988 CAPLUS
 (4) Anon; WO 9007576 1990 CAPLUS
 (5) Anon; WO 9014430 1990 CAPLUS

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L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2001 ACS
 AN 1998:672658 CAPLUS
 DN 129:271526
 TI Recombination of polynucleotide sequences using random or defined primers
 IN Arnold, Frances H.; Shao, Zhixin; Affholter, Joseph A.; Zhao, Huimin; Giver, Lorraine J.
 PA California Institute of Technology, USA
 SO PCT Int. Appl., 78 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 3

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9842832 | A1 | 19981001 | WO 1998-US5956 | 19980325 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 6153410 | A | 20001128 | US 1997-905359 | 19970804 |
| | AU 9869420 | A1 | 19981020 | AU 1998-69420 | 19980325 |
| | AU 724698 | B2 | 20000928 | | |
| | EP 920496 | A1 | 19990609 | EP 1998-915171 | 19980325 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO | | | | |
| | BR 9804791 | A | 19990817 | BR 1998-4791 | 19980325 |
| | JP 2000511783 | T2 | 20000912 | JP 1998-545987 | 19980325 |
| PRAI | US 1997-41666 | P | 19970325 | | |
| | US 1997-45211 | P | 19970430 | | |
| | US 1997-46256 | P | 19970512 | | |
| | US 1997-905359 | A | 19970804 | | |
| | US 1997-905058 | B2 | 19970801 | | |
| | WO 1998-US5956 | W | 19980325 | | |

L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2001 ACS
 AN 1998:66014 CAPLUS
 DN 128:124509
 TI Method of DNA shuffling with polynucleotides produced by blocking or interrupting a synthesis or amplification process
 IN Short, Jay M.
 PA Recombinant Biocatalysis, Inc., USA; Short, Jay M.
 SO PCT Int. Appl., 80 pp.
 CODEN: PIXXD2

DT Patent
 LA English
 FAN.CNT 15

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----|------------|------|----------|-----------------|----------|
| PI | WO 9801581 | A1 | 19980115 | WO 1997-US12239 | 19970709 |

W: AU, CA, IL, JP, US
 RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,
 SE
 US 5965408 A 19991012 US 1996-677112 19960709
 CA 2259628 AA 19980115 CA 1997-2259628 19970709
 AU 9736626 A1 19980202 AU 1997-36626 19970709
 EP 1007727 A1 20000614 EP 1997-933438 19970709
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 JP 2000514651 T2 20001107 JP 1998-505366 19970709
 PRAI US 1996-677112 A2 19960709
 WO 1997-US12239 W 19970709

L13 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2001 ACS

AN 1997:467751 CAPLUS

DN 127:76978

TI Methods for generating **polynucleotides** having desired characteristics by iterative selection and recombination

IN Stemmer, Willem P. C.; Crameri, Andreas

PA Affymax Technologies N.V., Neth. Antilles; Stemmer, Willem P. C.; Crameri,
Andreas

SO PCT Int. Appl., 208 pp.
CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9720078 | A1 | 19970605 | WO 1996-US19256 | 19961202 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| | RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5811238 | A | 19980922 | US 1995-564955 | 19951130 |
| | US 6117679 | A | 20000912 | US 1996-621859 | 19960325 |
| | AU 9710873 | A1 | 19970619 | AU 1997-10873 | 19961202 |
| | AU 713952 | B2 | 19991216 | | |
| | EP 876509 | A1 | 19981111 | EP 1996-940934 | 19961202 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| | JP 2000500981 | T2 | 20000202 | JP 1997-520744 | 19961202 |
| | AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI | US 1995-564955 | A | 19951130 | | |
| | US 1996-621859 | A2 | 19960325 | | |
| | US 1994-198431 | A2 | 19940217 | | |
| | AU 1995-29714 | A3 | 19950217 | | |
| | US 1996-537874 | A2 | 19960304 | | |
| | WO 1996-US19256 | W | 19961202 | | |

L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2001 ACS

AN 1995:863720 CAPLUS

DN 123:248553

TI Shuffling **mutagenesis** using pools of randomly-fragmented target DNA, **PCR** reassembly and in vitro and in vivo recombination in the creation of large libraries

IN Stemmer, Willem P. C.; Crameri, Andreas

PA Affymax Technologies N.V., Neth.
SO PCT Int. Appl., 119 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 8

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9522625 | A1 | 19950824 | WO 1995-US2126 | 19950217 |
| | W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UG | | | | |
| | RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | US 5605793 | A | 19970225 | US 1994-198431 | 19940217 |
| | CA 2182393 | AA | 19950824 | CA 1995-2182393 | 19950217 |
| | AU 9529714 | A1 | 19950904 | AU 1995-29714 | 19950217 |
| | AU 703264 | B2 | 19990325 | | |
| | EP 752008 | A1 | 19970108 | EP 1995-911826 | 19950217 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, | | | | |
| SE | CN 1145641 | A | 19970319 | CN 1995-191679 | 19950217 |
| | JP 10500561 | T2 | 19980120 | JP 1995-521977 | 19950217 |
| | EP 934999 | A1 | 19990811 | EP 1998-122040 | 19950217 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE | JP 2001057893 | A2 | 20010306 | JP 2000-201673 | 19950217 |
| | EP 1094108 | A2 | 20010425 | EP 2001-100962 | 19950217 |
| | EP 1094108 | A3 | 20010509 | | |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, | | | | |
| IE | US 5830721 | A | 19981103 | US 1996-537874 | 19960304 |
| | AU 9923816 | A1 | 19990812 | AU 1999-23816 | 19990416 |
| PRAI | US 1994-198431 | A2 | 19940217 | | |
| | AU 1995-29714 | A3 | 19950217 | | |
| | EP 1995-911826 | A3 | 19950217 | | |
| | JP 1995-521977 | A3 | 19950217 | | |
| | WO 1995-US2126 | W | 19950217 | | |

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E3 70 --> CARLSSON R/AU
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E11 1 CARLSSON S S/AU
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E13 14 CARLSSON T/AU
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E22 17 CARLSTEDT DUKE B/AU
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E25 3 CARLSTEDT E/AU

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1750181 1997<=PY<=2000
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L15 ANSWER 1 OF 12 MEDLINE
ACCESSION NUMBER: 2001030765 MEDLINE
DOCUMENT NUMBER: 20461642 PubMed ID: 11003812
TITLE: Endoscopy-negative reflux disease.
AUTHOR: Carlsson R; Holloway R H
CORPORATE SOURCE: Clinical Science, AstraZeneca R&D, Molndal, S-431 83,
Sweden.
SOURCE: BAILLIERE'S BEST PRACTICE & RESEARCH CLINICAL
GASTROENTEROLOGY, (2000 Oct) 14 (5) 827-37. Ref:
50
Journal code: DHW. ISSN: 1521-6918.
PUB. COUNTRY: ENGLAND: United Kingdom

Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200011
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001121

L15 ANSWER 2 OF 12 MEDLINE
ACCESSION NUMBER: 2001021134 MEDLINE
DOCUMENT NUMBER: 20467345 PubMed ID: 11012774
TITLE: Signals sustaining human immunoglobulin V gene hypermutation in isolated germinal centre B cells.
AUTHOR: Dahlenborg K; Pound J D; Gordon J; Borrebaeck C A; **Carlsson R**
CORPORATE SOURCE: Department of Immunotechnology, Lund University, Lund, Sweden.
SOURCE: IMMUNOLOGY, (2000 Oct) 101 (2) 210-7.
Journal code: GH7. ISSN: 0019-2805.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200011
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001107

L15 ANSWER 3 OF 12 MEDLINE
ACCESSION NUMBER: 2000426103 MEDLINE
DOCUMENT NUMBER: 20392304 PubMed ID: 10932154
TITLE: Recombining germline-derived CDR sequences for creating diverse single-framework antibody libraries.
AUTHOR: Soderlind E; Strandberg L; Jirholt P; Kobayashi N; Alexeiva V; Aberg A M; Nilsson A; Jansson B; Ohlin M; Wingren C; Danielsson L; **Carlsson R**; Borrebaeck C A
CORPORATE SOURCE: BioInvent Therapeutic AB, Lund, Sweden.. es@bioinvent.com
SOURCE: NATURE BIOTECHNOLOGY, (2000 Aug) 18 (8) 852-6.
Journal code: CQ3; 9604648. ISSN: 1087-0156.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200009
ENTRY DATE: Entered STN: 20000922
Last Updated on STN: 20000922
Entered Medline: 20000914

L15 ANSWER 4 OF 12 MEDLINE
ACCESSION NUMBER: 1999349921 MEDLINE
DOCUMENT NUMBER: 99349921 PubMed ID: 10423058
TITLE: Is the esophageal squamous epithelial barrier function impaired in patients with gastroesophageal reflux disease?.
AUTHOR: **Carlsson R**; Fandriks L; Jonsson C; Lundell L; Orlando R C
CORPORATE SOURCE: Dept. of Surgery, Sahlgrenska University Hospital, Goteborg, Sweden.

SOURCE: SCANDINAVIAN JOURNAL OF GASTROENTEROLOGY, (1999
May) 34 (5) 454-8.
Journal code: UCS; 0060105. ISSN: 0036-5521.

PUB. COUNTRY: Norway
(CLINICAL TRIAL)
(CONTROLLED CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199910

ENTRY DATE: Entered STN: 20000111
Last Updated on STN: 20000111
Entered Medline: 19991029

L15 ANSWER 5 OF 12 MEDLINE
ACCESSION NUMBER: 1999332868 MEDLINE
DOCUMENT NUMBER: 99332868 PubMed ID: 10406235
TITLE: Quality of life in patients with heartburn but without esophagitis: effects of treatment with omeprazole.
Comment in: Am J Gastroenterol. 1999 Jul;94(7):1723-4
Havelund T; Lind T; Wiklund I; Glise H; Hernqvist H;
Lauritsen K; Lundell L; Pedersen S A; Carlsson R;
Junghard O; Stubberod A; Anker-Hansen O
CORPORATE SOURCE: Department of Medicine, Odense University Hospital,
Denmark.

SOURCE: AMERICAN JOURNAL OF GASTROENTEROLOGY, (1999 Jul)
94 (7) 1782-9.
Journal code: 3HE; 0421030. ISSN: 0002-9270.

PUB. COUNTRY: United States
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199907

ENTRY DATE: Entered STN: 19990806
Last Updated on STN: 19990806
Entered Medline: 19990727

L15 ANSWER 6 OF 12 MEDLINE
ACCESSION NUMBER: 1999328003 MEDLINE
DOCUMENT NUMBER: 99328003 PubMed ID: 10399804
TITLE: Differences in quality of life in men and women with ischemic heart disease. A prospective controlled study.
AUTHOR: Westin L; Carlsson R; Erhardt L; Cantor-Graae E;
McNeil T
CORPORATE SOURCE: Department of Cardiology, University Hospital, Malmo,
Sweden.

SOURCE: SCANDINAVIAN CARDIOVASCULAR JOURNAL, (1999) 33
(3) 160-5.
Journal code: CTA; 9708377. ISSN: 1401-7431.

PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199909

ENTRY DATE: Entered STN: 19991005
Last Updated on STN: 19991005
Entered Medline: 19990923

L15 ANSWER 7 OF 12 MEDLINE

ACCESSION NUMBER: 1999315249 MEDLINE
DOCUMENT NUMBER: 99315249 PubMed ID: 10383525
TITLE: On demand therapy with omeprazole for the long-term management of patients with heartburn without oesophagitis--a placebo-controlled randomized trial.
AUTHOR: Lind T; Havelund T; Lundell L; Glise H; Lauritsen K; Pedersen S A; Anker-Hansen O; Stubberod A; Eriksson G; **Carlsson R**; Junghard O
CORPORATE SOURCE: Department of Surgery, Karlsjukhuset, Skovde, Sweden.
SOURCE: ALIMENTARY PHARMACOLOGY AND THERAPEUTICS, (1999 Jul) 13 (7) 907-14.
PUB. COUNTRY: Journal code: A5D; 8707234. ISSN: 0269-2813.
ENGLAND: United Kingdom
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 19990827
Last Updated on STN: 19990827
Entered Medline: 19990819

L15 ANSWER 8 OF 12 MEDLINE
ACCESSION NUMBER: 1999262277 MEDLINE
DOCUMENT NUMBER: 99262277 PubMed ID: 10330279
TITLE: Co-ligation of CD44 on naive human tonsillar B cells induces progression towards a germinal center phenotype.
AUTHOR: Ingvarsson S; Dahllborg K; **Carlsson R**; Borrebaeck C A
CORPORATE SOURCE: Department of Immunotechnology, Lund University, Box 7031, 220 07 Lund, Sweden.
SOURCE: INTERNATIONAL IMMUNOLOGY, (1999 May) 11 (5) 739-44.
PUB. COUNTRY: Journal code: AY5; 8916182. ISSN: 0953-8178.
ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ENTRY DATE: Entered STN: 19990712
Last Updated on STN: 19990712
Entered Medline: 19990623

L15 ANSWER 9 OF 12 MEDLINE
ACCESSION NUMBER: 1999246128 MEDLINE
DOCUMENT NUMBER: 99246128 PubMed ID: 10231097
TITLE: Complementarity-determining region (CDR) implantation: a theme of recombination.
AUTHOR: Soderlind E; Ohlin M; **Carlsson R**
CORPORATE SOURCE: BioInvent Therapeutic AB, Lund, Sweden.. es@bioinvent.com
SOURCE: IMMUNOTECHNOLOGY, (1999 Mar) 4 (3-4) 279-85.
Ref: 25
PUB. COUNTRY: Journal code: CR0; 9511979. ISSN: 1380-2933.
Netherlands
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 199908
ENTRY DATE: Entered STN: 19990913
Last Updated on STN: 19990913
Entered Medline: 19990831

L15 ANSWER 10 OF 12 MEDLINE
ACCESSION NUMBER: 1999044819 MEDLINE
DOCUMENT NUMBER: 99044819 PubMed ID: 9829354
TITLE: The usefulness of a structured questionnaire in the assessment of symptomatic gastroesophageal reflux disease.
disease.
AUTHOR: Carlsson R; Dent J; Bolling-Sternevald E;
Johnsson F; Junghard O; Lauritsen K; Riley S; Lundell L
CORPORATE SOURCE: Dept. of Surgery, Sahlgren's University Hospital,
Goteborg,
Sweden.
SOURCE: SCANDINAVIAN JOURNAL OF GASTROENTEROLOGY, (1998
Oct) 33 (10) 1023-9.
Journal code: UCS; 0060105. ISSN: 0036-5521.
PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990202
Last Updated on STN: 19990202
Entered Medline: 19990115

L15 ANSWER 11 OF 12 MEDLINE
ACCESSION NUMBER: 1999018955 MEDLINE
DOCUMENT NUMBER: 99018955 PubMed ID: 9802147
TITLE: Serum cholesterol, lifestyle, working capacity and quality of life in patients with coronary artery disease.
Experiences from a hospital-based secondary prevention programme.
AUTHOR: Carlsson R
CORPORATE SOURCE: Department of Cardiology, Malmo University Hospital, Lund University, Sweden.
SOURCE: SCANDINAVIAN CARDIOVASCULAR JOURNAL. SUPPLEMENT,
(1998) 50 1-20.
Journal code: CTB; 9711058. ISSN: 1401-7458.
PUB. COUNTRY: Norway
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990202
Last Updated on STN: 19990202
Entered Medline: 19990119

L15 ANSWER 12 OF 12 MEDLINE
ACCESSION NUMBER: 1998241142 MEDLINE
DOCUMENT NUMBER: 98241142 PubMed ID: 9581986
TITLE: Gastro-oesophageal reflux disease in primary care: an international study of different treatment strategies with omeprazole. International GORD Study Group.
AUTHOR: Carlsson R; Dent J; Watts R; Riley S; Sheikh R;
Hattelbakk J; Haug K; de Groot G; van Oudvorst A; Dalvag A;
Junghard O; Wiklund I

CORPORATE SOURCE: Department of Surgery, Sahlgren's University Hospital,
Gothenburg, Sweden.
SOURCE: EUROPEAN JOURNAL OF GASTROENTEROLOGY AND HEPATOLOGY,
(1998 Feb) 10 (2) 119-24.
Journal code: B9X; 9000874. ISSN: 0954-691X.
PUB. COUNTRY: ENGLAND: United Kingdom
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(RANDOMIZED CONTROLLED TRIAL)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199806
ENTRY DATE: Entered STN: 19980708
Last Updated on STN: 19980708
Entered Medline: 19980624

=> E BORREBAECK C/AU 25

E1 1 BORREAU J P/AU
E2 1 BORREBACH D E/AU
E3 13 --> BORREBAECK C/AU
E4 111 BORREBAECK C A/AU
E5 1 BORREBAECK C K/AU
E6 43 BORREBAEK B/AU
E7 1 BORRECA C/AU
E8 1 BORRECA F A/AU
E9 4 BORREDA D/AU
E10 25 BORREDON C/AU
E11 16 BORREDON J/AU
E12 1 BORREDON J J/AU
E13 4 BORREDON P/AU
E14 2 BORREE J/AU
E15 1 BORREE J A/AU
E16 1 BORREGA F/AU
E17 2 BORREGA GARCIA P/AU
E18 1 BORREGA N G/AU
E19 1 BORREGA P/AU
E20 138 BORREGAARD N/AU
E21 1 BORREGALES L/AU
E22 1 BORREGALES TORRES E/AU
E23 1 BORREGANA J/AU
E24 1 BORREGARD L/AU
E25 1 BORREGARD N/AU

=> S (E3)

L16 13 ("BORREBAECK C"/AU)

=> DIS L16 1- IBIB

YOU HAVE REQUESTED DATA FROM 13 ANSWERS - CONTINUE? Y/(N):Y
THE ESTIMATED COST FOR THIS REQUEST IS 1.95 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L16 ANSWER 1 OF 13 MEDLINE

ACCESSION NUMBER: 1999308789 MEDLINE

DOCUMENT NUMBER: 99308789 PubMed ID: 10381082

TITLE: Synthesis of a eukaryotic virus protein in a prokaryotic
viral-cell system: production of the adenovirus type 2
fiber shaft fragment by a tightly regulated T7POL-M13
expression system.

AUTHOR: Duenas M; Rodriguez E; Nilsson N; Everitt E;
Borrebaeck C

CORPORATE SOURCE: Immunotechnology and Diagnosis Division, Center for Genetic
Genetic

SOURCE: Engineering and Biotechnology (CIGB), Havanna, Cuba.
JOURNAL OF VIROLOGICAL METHODS, (1999 May) 79 (2) 121-31.

PUB. COUNTRY: Journal code: HQR; 8005839. ISSN: 0166-0934.
Netherlands

LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199908

ENTRY DATE: Entered STN: 19990820
Last Updated on STN: 20000824
Entered Medline: 19990810

L16 ANSWER 2 OF 13 MEDLINE
ACCESSION NUMBER: 96324736 MEDLINE
DOCUMENT NUMBER: 96324736 PubMed ID: 8757960
TITLE: Elevated expression levels of an Ig transgene in mice
links
the IgH 3' enhancer to the regulation of IgH expression.
AUTHOR: Arulampalam V; Furebring C; Samuelsson A; Lendahl U;
Borrebaeck C; Lundkvist I; Pettersson S
CORPORATE SOURCE: Department of Biosciences, Karolinska Institute, NOVUM,
141
SOURCE: 57 Huddinge, Sweden.
INTERNATIONAL IMMUNOLOGY, (1996 Jul) 8 (7) 1149-57.
Journal code: AY5; 8916182. ISSN: 0953-8178.

PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199701

ENTRY DATE: Entered STN: 19970219
Last Updated on STN: 19970219
Entered Medline: 19970121

L16 ANSWER 3 OF 13 MEDLINE
ACCESSION NUMBER: 81248997 MEDLINE
DOCUMENT NUMBER: 81248997 PubMed ID: 7256185
TITLE: Simple routine assay for serum urea using immobilized
urease.
AUTHOR: **Borrebaeck C**; Borjeson J
SOURCE: SCANDINAVIAN JOURNAL OF CLINICAL AND LABORATORY
INVESTIGATION, (1980 Apr) 40 (2) 169-72.
Journal code: UCP; 0404375. ISSN: 0036-5513.

PUB. COUNTRY: Norway
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198109

ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19810925

L16 ANSWER 4 OF 13 MEDLINE
ACCESSION NUMBER: 81193139 MEDLINE
DOCUMENT NUMBER: 81193139 PubMed ID: 7014722
TITLE: Liposome immune assay (LIA). Use of membrane antigens
inserted into labeled lipid vesicles as targets in immune assays.

AUTHOR: Axelsson B; Eriksson H; **Borrebaeck C**; Mattiasson B; Sjogren H O
CONTRACT NUMBER: CA 14924 (NCI)
SOURCE: JOURNAL OF IMMUNOLOGICAL METHODS, (1981) 41 (3) 351-63.
Journal code: IFE; 1305440. ISSN: 0022-1759.
PUB. COUNTRY: Netherlands
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
Priority Journals
ENTRY MONTH: 198107
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19970203
Entered Medline: 19810723

L16 ANSWER 5 OF 13 MEDLINE
ACCESSION NUMBER: 81117356 MEDLINE
DOCUMENT NUMBER: 81117356 PubMed ID: 7462242
TITLE: Carbohydrate binding properties of th Dolichos biflorus lectin and its subunits.
AUTHOR: Etzler M E; Gupta S; **Borrebaeck C**
CONTRACT NUMBER: GM 21882 (NIGMS)
SOURCE: JOURNAL OF BIOLOGICAL CHEMISTRY, (1981 Mar 10) 256 (5) 2367-70.
Journal code: HIV; 2985121R. ISSN: 0021-9258.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
Priority Journals
ENTRY MONTH: 198104
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19970203
Entered Medline: 19810424

L16 ANSWER 6 OF 13 MEDLINE
ACCESSION NUMBER: 81062474 MEDLINE
DOCUMENT NUMBER: 81062474 PubMed ID: 7192093
TITLE: Carbohydrate binding activity of a lectin-like glycoprotein from stems and leaves of Dolichos biflorus.
AUTHOR: Etzler M E; **Borrebaeck C**
CONTRACT NUMBER: GM 21882 (NIGMS)
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1980 Sep 16) 96 (1) 92-7.
Journal code: 9Y8; 0372516. ISSN: 0006-291X.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
Priority Journals
ENTRY MONTH: 198101
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19970203
Entered Medline: 19810116

L16 ANSWER 7 OF 13 MEDLINE
ACCESSION NUMBER: 81060329 MEDLINE
DOCUMENT NUMBER: 81060329 PubMed ID: 7435975
TITLE: Lectin-carbohydrate interactions studied by a competitive enzyme inhibition assay.
AUTHOR: **Borrebaeck C**; Mattiasson B
SOURCE: ANALYTICAL BIOCHEMISTRY, (1980 Sep 15) 107 (2) 446-50.
Journal code: 4NK; 0370535. ISSN: 0003-2697.

PUB. COUNTRY: United States
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198101
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19900316
Entered Medline: 19810126

L16 ANSWER 8 OF 13 MEDLINE
ACCESSION NUMBER: 81004436 MEDLINE
DOCUMENT NUMBER: 81004436 PubMed ID: 7409169
TITLE: A study of binding properties of the isolectins from the Dolichos biflorus plant using affinity electrophoresis.
AUTHOR: Borrebaeck C; Etzler M E
CONTRACT NUMBER: GM 21882 (NIGMS)
SOURCE: FEBS LETTERS, (1980 Aug 11) 117 (1) 237-40.
Journal code: EUH; 0155157. ISSN: 0014-5793.

PUB. COUNTRY: Netherlands
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
Priority Journals
ENTRY MONTH: 198011
ENTRY DATE: Entered STN: 19900316
Last Updated on STN: 19970203
Entered Medline: 19801125

L16 ANSWER 9 OF 13 MEDLINE
ACCESSION NUMBER: 80245994 MEDLINE
DOCUMENT NUMBER: 80245994 PubMed ID: 7398639
TITLE: A study of structurally related binding properties of concanavalin A using differential scanning calorimetry.
AUTHOR: Borrebaeck C; Mattiasson B
SOURCE: EUROPEAN JOURNAL OF BIOCHEMISTRY, (1980) 107 (1) 67-71.
Journal code: EMZ; 0107600. ISSN: 0014-2956.
GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198010
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19970203
Entered Medline: 19801024

L16 ANSWER 10 OF 13 MEDLINE
ACCESSION NUMBER: 79023521 MEDLINE
DOCUMENT NUMBER: 79023521 PubMed ID: 359194
TITLE: Non-equilibrium enzyme immunoassay of gentamicin.
AUTHOR: Mattiasson B; Svensson K; Borrebaeck C; Jonsson S; Kronvall G
SOURCE: CLINICAL CHEMISTRY, (1978 Oct) 24 (10) 1770-3.
Journal code: DBZ; 9421549. ISSN: 0009-9147.
PUB. COUNTRY: United States
LANGUAGE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: English
Priority Journals
ENTRY MONTH: 197812
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19781227

L16 ANSWER 11 OF 13 MEDLINE
ACCESSION NUMBER: 78213481 MEDLINE
DOCUMENT NUMBER: 78213481 PubMed ID: 352577
TITLE: Thermometric enzyme linked immunosorbent assay in continuous flow system: optimization and evaluation using human serum albumin as a model system.
AUTHOR: Borrebaeck C; Borjeson J; Mattiasson B
SOURCE: CLINICA CHIMICA ACTA, (1978 Jun 15) 86 (3) 267-78.
Journal code: DCC; 1302422. ISSN: 0009-8981.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197809
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19780915

L16 ANSWER 12 OF 13 MEDLINE
ACCESSION NUMBER: 78084814 MEDLINE
DOCUMENT NUMBER: 78084814 PubMed ID: 620781
TITLE: An analytical flow system based on reversible immobilization of enzymes and whole cells utilizing specific lectin-glucoprotein interactions.
AUTHOR: Mattiasson B; Borrebaeck C
SOURCE: FEBS LETTERS, (1978 Jan 1) 85 (1) 119-23.
Journal code: EUH; 0155157. ISSN: 0014-5793.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197803
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19970203
Entered Medline: 19780310

L16 ANSWER 13 OF 13 MEDLINE
ACCESSION NUMBER: 77242402 MEDLINE
DOCUMENT NUMBER: 77242402 PubMed ID: 329888
TITLE: Thermometric enzyme linked immunosorbent assay: TELISA.
AUTHOR: Mattiasson B; Borrebaeck C; Sanfridson B; Mosbach K
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1977 Aug 11) 483 (2)
221-7.
Journal code: AOW; 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197710
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19900314
Entered Medline: 19771014

=>

---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS

| SINCE FILE ENTRY | TOTAL SESSION |
|---------------------|------------------|
| 6.75 | 95.20 |

FULL ESTIMATED COST

STN INTERNATIONAL LOGOFF AT 16:49:17 ON 19 JUN 2001